III. Results

The present study provides significant new insight into the structure and research potential of archaeological site 1Ja643. The site measures approximately 2 kilometers (NE-SW) by 7 to 50 meters (NW-SE), which is considerably longer than previously reported by the University of Alabama (Solis and Futato 1987) (see Figure 8). An estimated 75 percent of the site has eroded into the Tennessee River and is manifested by a dense scatter of fire cracked rocks, chipped stone debitage and tools, aboriginal pottery, freshwater shellfish and bone on the surface of an exposed clay subsoil matrix. The surface artifact deposit begins at the foot of the exposed bluff and continues beneath the waters of Guntersville Lake. Although no underwater investigations were conducted at the site, a visible drop off approximately 20 m from the shore probably corresponds to the western edge of the original levee landform. The remaining intact portions of the site (estimated 25%) are capped by an asphalt road (old CR91), which has slowed the rate of erosion.

Other impacts to the site include chronic surface collecting by relic hunters and sporadic looting by illegal diggers. No active looting evidence was observed, but the TVA archaeologist was supplied with a copy of this report. The impact from surface collecting and looting at 1Ja643 is worsened by its ready accessibility from a rural paved county road. During the course of the project more than a dozen passersby stated that this was their favorite place to collect arrowheads. Their collecting behavior continues undaunted by our archaeological project, despite its direct violation of federal law.

Survey investigations of the site included surface reconnaissance of the entire site on the Guntersville Lake shoreline, selected surface collections along the beach at each of the eight proposed work areas, bank profile cuts, and posthole digger tests at each of the proposed work areas. These investigations indicated that fire cracked rock and chipped stone artifacts were pervasive over the entire site, while aboriginal pottery and shellfish concentrations were more restricted in their distribution. While numerous bank exposures were examined, visibility over most of the bluff was obscured by vegetation or by slumpage. Pottery was uncommon south of Work Area 3 and it was most concentrated in the vicinity of Work Area 2. Continuing north, pottery dropped in frequency from Work Area 1 but a minor pottery deposit was identified on the shore near the northern end of the site. Shellfish remains were most concentrated from Work Area 3 to Work Area 2. Exposures of shellfish lenses were visible at both work areas and a more consolidated shell midden deposit was observed between the two.

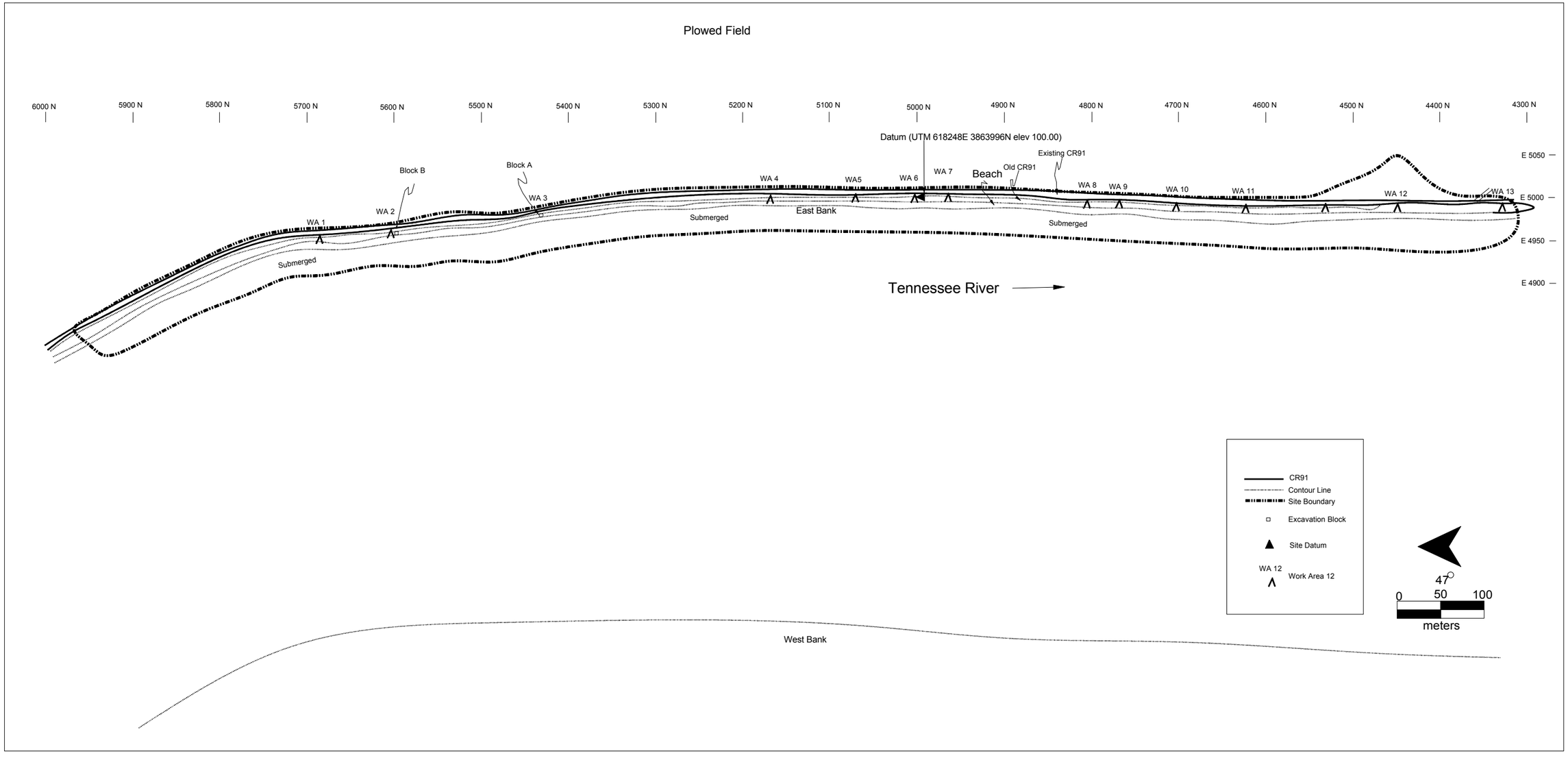

Figure 8. Plan of Site 1Ja643

Cultural remains over most of the site probably dates to the Archaic Period and, ironically, this component was the least sampled by the test excavations. Although Mississippian or Proto-historic components were suggested by pottery sherds that were collected from the beach, all components that postdate the Middle Woodland appear to have been destroyed, either by lake erosion or by construction and use of old CR91 and other historic transportation routes that preceded it. It is remotely possible that intact post-Middle Woodland components may be present in areas of 1Ja643 that were not sampled by excavation.

The Proposed Work Areas

Selective surface collections were conducted along the shoreline at each of the eight proposed work areas. A cursory surface examination also was made in the recently harvested soybean field, which was located immediately east of CR91. Work Area 2 yielded the greatest abundance of aboriginal pottery sherds with lesser amounts (but not insignificant amounts) produced by Work Areas 1 and 3. Although numerous chipped chert tools were observed in the beach deposits, only one diagnostic projectile point was recovered from the surface. Moreover, most of the sherds from the beach were highly weathered and their surface decorations denuded, which made them of limited diagnostic value. Bone was not abundant on the beach and no human remains were observed.

The exposed bluffs at the proposed work areas were cleaned and mapped. The two southernmost work areas did not possess any good bank exposures and were heavily vegetated and these two areas were not included in the soil mapping.

A series of posthole digger tests were excavated at each of the eight proposed work areas. One of these tests was placed within the proposed work site at each area and four work areas were sampled by additional tests. Work Areas 1, 2, and 3 received an additional test on the beach and another at the edge of the right-of-way (ROW), east of the present CR91. Work Area 5 received an additional test at the edge of the ROW, east of the present CR91.

Work Area 1 (UTM 618704E 3863529N) was the northernmost of the proposed work areas. In addition to the typical fire cracked rock and chert debitage, Work Area 1 yielded a small amount of aboriginal pottery (Long Branch Fabric Marked and residual sherds), 1 large triangular chert PPK fragment, and mussel shell. A posthole digger test in this work area yielded no artifacts to a maximum depth of 147 cm below surface. Another posthole test that was placed on the beach below Work Area 1 yielded no

cultural material. A third posthole test that was placed immediately east of CR91 at Work Area 1 yielded no cultural material in 75 cm depth. Figure 9 shows the soil profiles for Work Areas 1 and 2.

Work Area 2 (UTM 618657E 3863466N) was located approximately 50-60 meters southwest of Work Area 1. As previously noted, the beach at this locale yielded the greatest frequency of aboriginal pottery of any part of the site. A discontinuous shell lense was observed in profile on the south side of the gully. A posthole digger test in this work area, which was placed on the northeast side of the gully, yielded two small eroded pottery sherds, one utilized chert flake, chert debitage, and fire cracked rock from approximately 110 cm to 143 cm below surface. Another posthole test that was placed on the beach below Work Area 1 yielded no artifacts. A third posthole test that was placed immediately east of CR91 at Work Area 1 yielded no cultural material.

The potential for the former existence of a Mississippian stone box cemetery was suggested at one area north of Work Area 2. The evidence consisted of a series of large flat limestone slabs, similar to those used in stone box grave construction elsewhere in Tennessee. These slabs were mostly beneath the waters of Lake Guntersville, approximately 25 m upstream from Block B and 5 m offshore, and only one limestone slab was observed on the shoreline. It would appear that this may be all that remains of a small family cemetery, which was completely deflated and scattered by lake erosion. No large limestone rocks were observed on the bank in this vicinity, nor were large pieces of limestone present elsewhere on the beach (with one possible exception—see discussion of Work Area 11) or in the excavation of Block B. Excavation Block B was located at Work Area 2.

A plastic mineral water bottle filled with aboriginal pottery sherds and other items was recovered from the beach at Work Area 2. This collection, apparently discarded or lost by a relic hunter, proved to be a microcosm of the site. It contained Long Branch Fabric Marked (n=25), Wright Check Stamped (n=5), other unidentified wares (n=9), and one animal bone. In comparison, our crew collected the following items from the surface: 1 daub piece; 10 Long Branch Fabric Marked, 2 Wright Check Stamped, and 4 residual sherds; 1 chert core, 1 chert PPK medial fragment, and fire cracked rock. Many hundreds of small to large eroded sherds were noted by our crew but these were not collected.

Artifacts collected during mechanical stripping for preparation of Block B yielded: Long Branch Fabric Marked (n=6), Mulberry Creek Plain (n=2), cord marked (n=1), and corn cob marked (n=1) sherds.

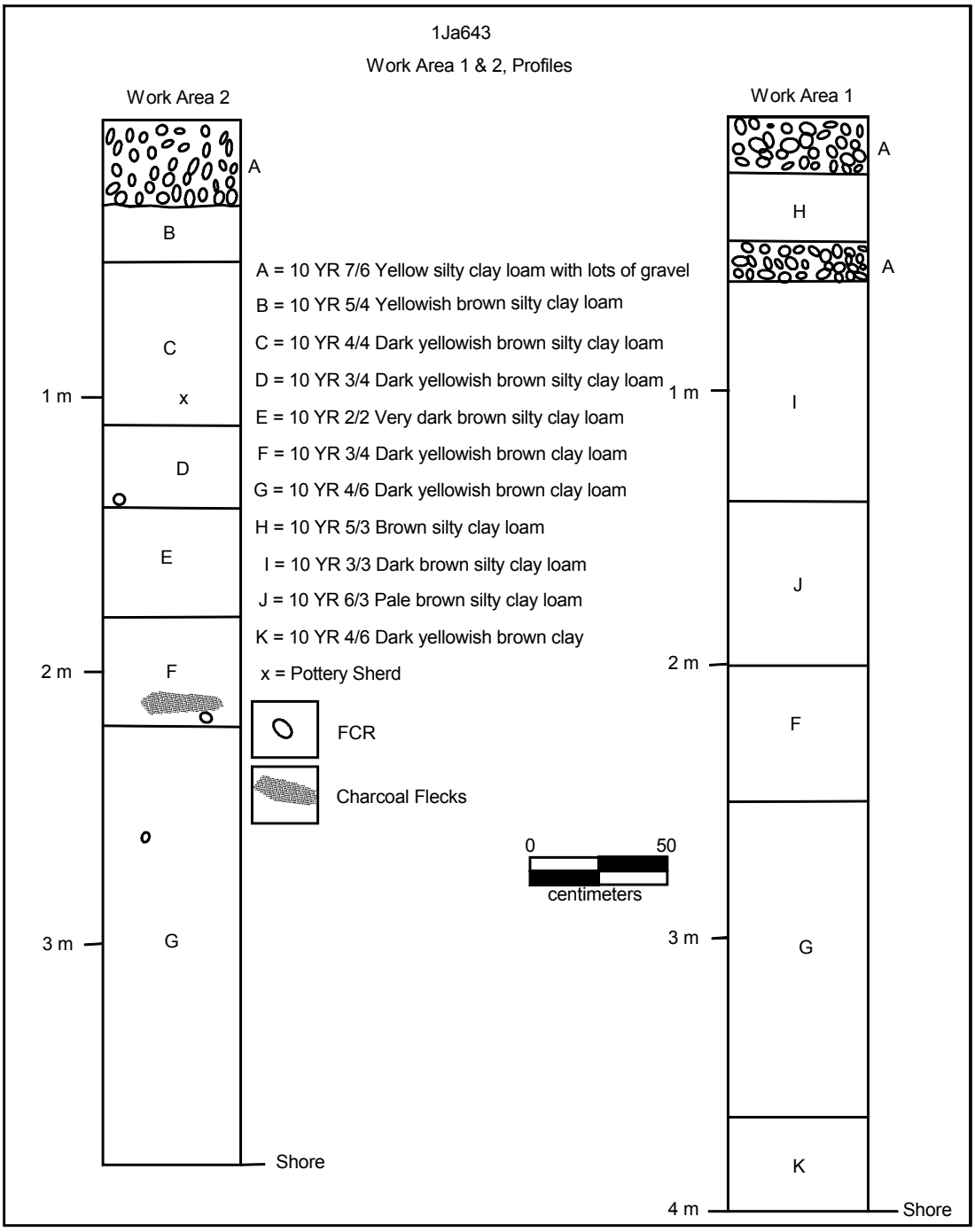

Figure 9. Work Areas 1 and 2, Bank Profiles, 1Ja643

Work Area 3 (UTM 618544E 3863327N) is located approximately 140 m southwest of Work Area 2. In addition to the typical fire cracked rock and chert debitage deposit, the beach at Work Area 3 yielded a minor amount of aboriginal pottery and a moderate amount of shellfish remains. Artifacts collected from the beach include: 3 Long Branch Fabric Marked, 1 Wright Check Stamped, and 1 Mulberry Creek Plain sherds; animal bone; 2 informal unifacial chert flake tools; and 1 large limestone biface fragment. A posthole digger test that was placed in the proposed work area, north of the gully (UTM 618536E 3863321N), yielded two chert debitage pieces from 91 to 140 cm below surface. Another posthole test that was placed on the beach below Work Area 3 (UTM 618538E 3863338N) yielded one chert debitage and fire cracked rock from 60 to 65 cm below surface. A third posthole test that was placed immediately east of CR91 at Work Area 1 (UTM 618554E 3863319N) yielded freshwater mussel shell, chert debitage, and fire cracked rock from 0-10 cm below surface. This test was excavated to a maximum depth of 75 cm below surface. Figure 10 shows the soil profiles for Work Areas 3 and 5. Excavation Block A was located at Work Area 3.

Artifacts collected during mechanical stripping for preparation of Block A yielded: 25 Long Branch Fabric Marked, 1 Wright Check Stamped, and 1 residual sherd; animal bone, 9 chert debitage, and fire cracked rock.

Work Area 5 (UTM 618302E 3863061N) is located approximately 260 m southwest of Work Area 3 and is centered at 5078.5N 5004.4E. Artifacts in this area consisted primarily of fire cracked rock and chert debitage; no pottery sherds or diagnostic stone tools were observed. Artifacts collected from the beach in this area include one utilized chert flake, chert debitage, and fire cracked rock. No shell was visible in the exposed bank, but a few shellfish remains were present in this vicinity. A visible dark organic midden was observed in the bluff exposure at this work area, although few artifacts were observed protruding from it. A posthole digger test that was placed in the proposed work area beneath the old CR91 pavement surface (UTM 618300E 3863060N) yielded one Wright Check Stamped sherd, two residual sherds, and two pieces of chert debitage from 118 to 146 cm below surface. Another posthole digger test that was placed immediately east of CR91 yielded no cultural material.

Work Area 6 is centered at 5011.9N 5005.2E. One sterile posthole test was excavated in this area beneath the old CR91 pavement surface (UTM 618028E 3862799N).

Work Area 10 (UTM 618042E 3862849N) is centered at 4707.0N 4994.0E. Artifacts in this area consisted primarily of fire cracked rock; no pottery sherds or

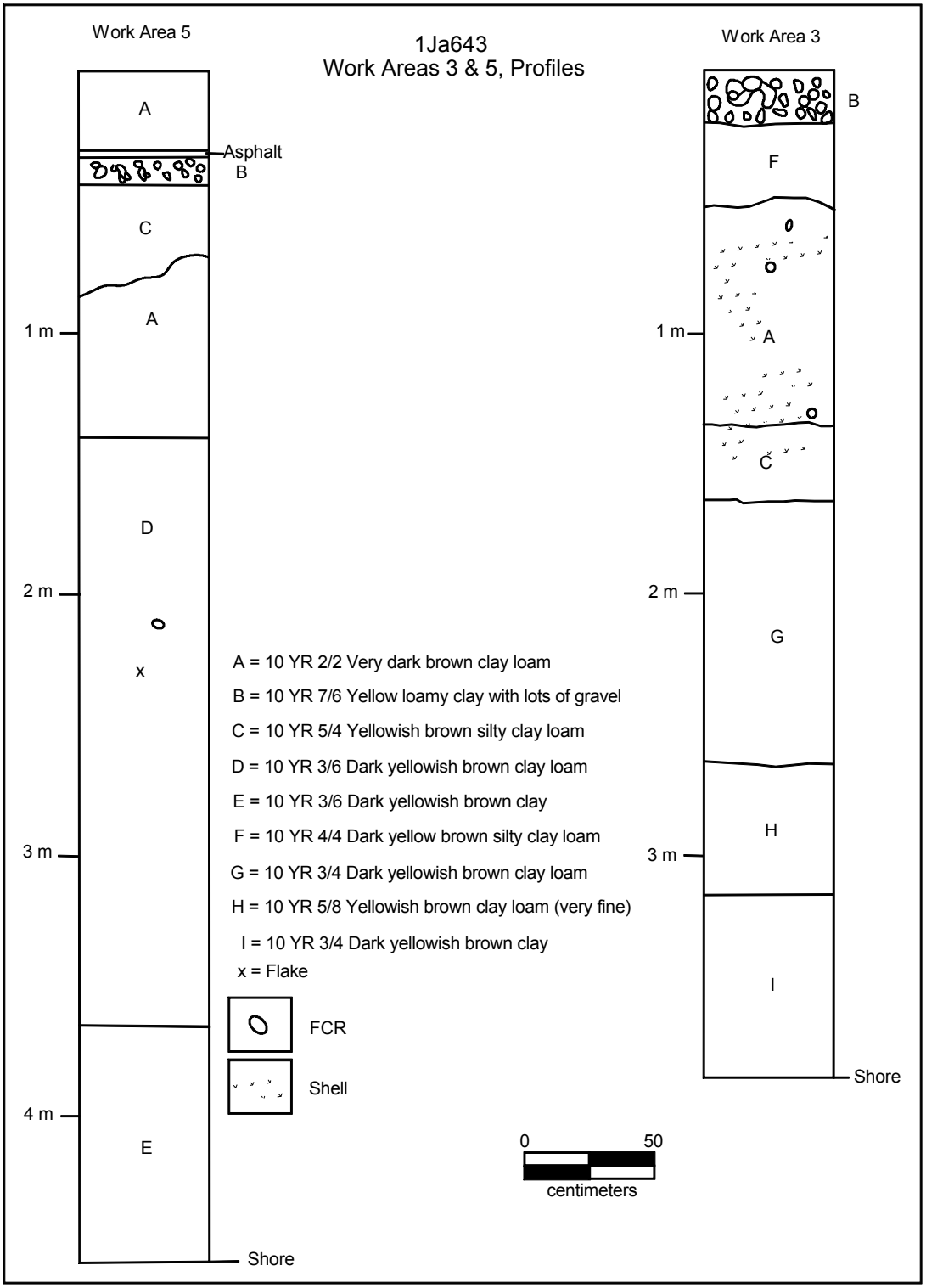

Figure 10. Work Areas 3 and 5, Bank Profiles, 1Ja643

diagnostic stone tools were observed. Although no shell was visible in the exposed bank, a minor amount of shellfish remains was present in this vicinity. Two chert cores were collected from the beach surface in this area. A posthole digger test that was placed in the proposed work area beneath the old CR91 surface (UTM 618032E 3862799N) yielded six pieces of chert debitage from 84 to 112 cm below surface. Figure 11 shows the soil profiles for Work Areas 10 and 11. The bank profile was mapped at UTM 618036E 3862812N.

Work Area 11 (UTM 617978E 3862807N) is centered at 4625.9N 4990.0E. One worked soapstone artifact, possibly a gorget fragment, was recovered from the beach south of Work Area 11. Approximately 30 m south of Work Area 11 several large flake limestone slabs were noted, which may represent a deflated stone box grave. Although no shell was visible in the exposed bank, a moderate amount of shellfish remains was present in this vicinity. A posthole digger test that was placed in the proposed work area (UTM 617970E 3862746N) yielded one chert PPK fragment, one residual pottery sherd, and five pieces of chert debitage from 18 to 97 cm below ground surface. The bank profile was mapped at UTM 617967E 3862751N. No pottery was observed on the beach in this vicinity.

Work Area 12, located near the southern end of the site, possessed limited bank exposure and a narrow beach zone. No exposures of shellfish remains were evident and only a few scattered shells were observed on the beach. Chert debitage was present in low frequency and a moderate amount of fire cracked rock was observed. No aboriginal pottery or bone was present in this vicinity and no artifacts were collected from the beach. A posthole digger test that was placed in the proposed work area (UTM 617824E 3862620N) yielded one utilized chert flake and six pieces of chert debitage from 35 to 93 cm below surface.

Work Area 13 was the southernmost of the proposed work areas and is near the confluence of Long Island Creek and the Tennessee River. It possessed limited bank exposure and a narrow beach zone. No exposures of shellfish remains were evident and only a few scattered shells were observed on the surface. A few pieces of chert debitage were observed but no diagnostic tools were observed, nor was any aboriginal pottery or bone present. Fire cracked rock was common. Artifacts collected from the beach in this area include two chert core tools and three pieces of chert debitage. This area exhibited limited research potential. A posthole digger test that was placed in the proposed work area yielded two pieces of chert debitage from 73 to 110 cm below surface.

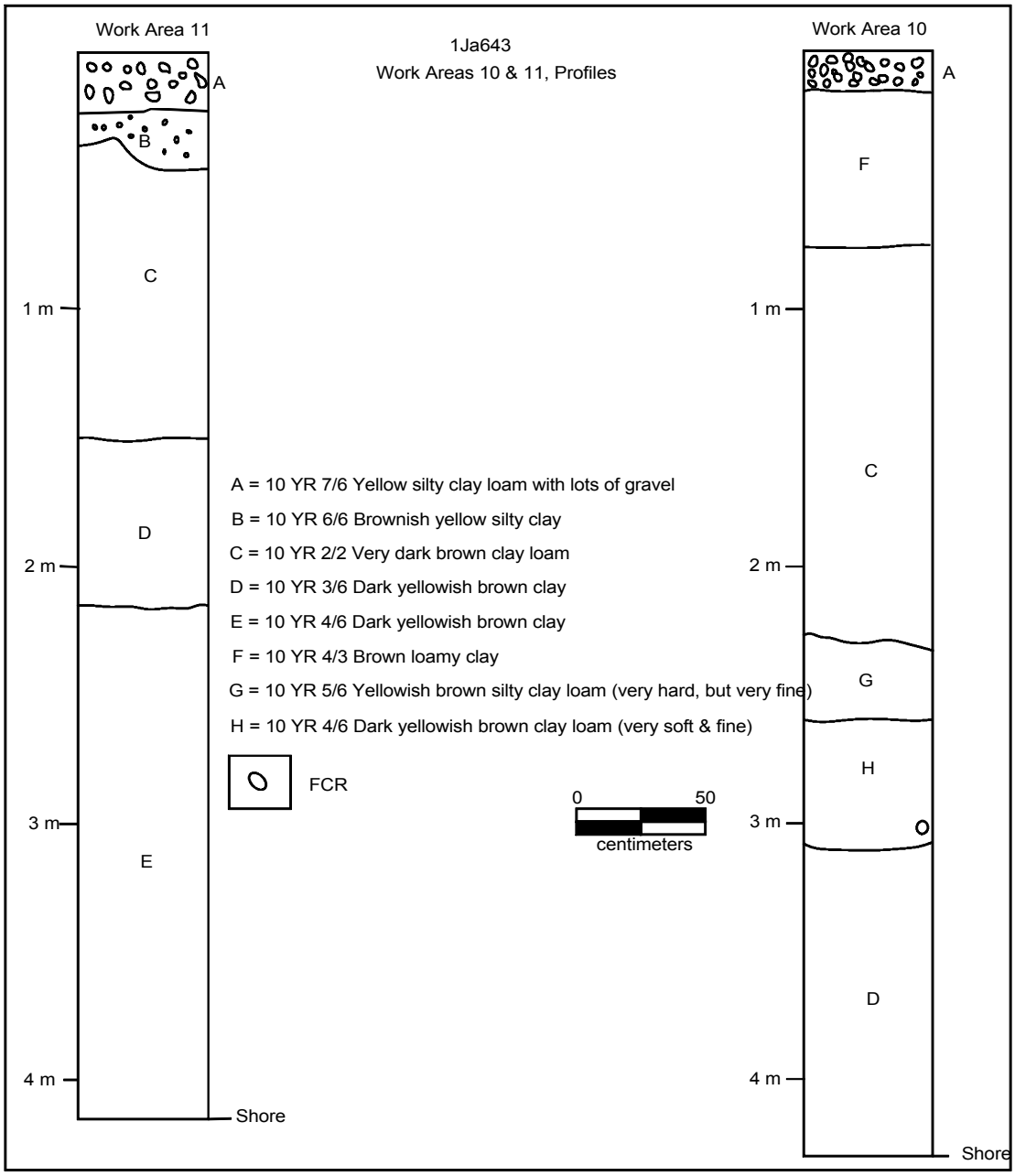

Figure 11. Work Areas 10 and 11, Bank Profiles, 1Ja643

Excavation Block A

Work Area 3 exhibited a moderate frequency of artifacts on the lake shore and several lenses of freshwater shellfish remains in the exposed bank. This proposed work area was sampled by excavation Block A, which measured 3 x 3 m and was composed of Test Units 1-9. Block A was located at 5438.8-5441.8N and 4977.5-4980.5E. The datum elevation used for measurements at Block A was 98.92 m (see Figure 12). Excavation of this block began after removal of the overlying asphalt road, gravel road fill, and older dirt road surfaces. Soils beneath the old roads consisted of extremely compact fine silty clay loam with a very low artifact frequency. The entire block was excavated to the base of Level 5. At that point, the block was reduced in size to a 3 x 2 m square and Test Units 3, 6, and 9 were terminated. The excavation of Test Units 1 and 2 was terminated at the base of Level 7. Test Unit 7 was terminated at the base of Level 12. Test Unit 8 was terminated at the base of Level 14. Test Unit 5 was excavated to the base of Level 17. Representative views of Block A are shown in Figures 13 and 14 and soil profiles are illustrated in Figures 15 and 16.

Features

Four features were identified in Block A. Features 1, 2, and 3 were identified at the base of Level 3. Feature 4 was identified in Levels 5 and 6 (Figures 17 through 21). Each feature is described in the following text.

Feature 1 consisted of a large circular basin-shaped pit that was partially overlapped by a smaller circular basin-shaped pit that extended into the west wall of the excavation block. This feature was located within Test Units 1 and 4. It was originally identified at the base of Level 3. Feature 1 contained a variety of aboriginal ceramics (n=79 sherds), including: Long Branch Fabric Marked, complicated stamped, Wright Check Stamped, Mulberry Creek Plain, and residual examples. Long Branch Fabric Marked was the dominant identifiable ware (n=33), followed by undecorated sherds (n=10). All of these sherds were from limestone tempered vessels. One small soapstone vessel rim sherd was present in this feature, as were two hammerstones. The chipped stone assemblage included: 1 large triangular PPK, 1 biface fragment, and 96 debitage fragments. The debitage sample was dominated by Ridge and Valley chert but also included quartz, Coastal Plain chert, and jasper. The feature yielded 478 g of fire cracked rock, as well as a small sample of freshwater mussel shell and animal bone. The presence of complicated sherds indicate a Middle Woodland deposition date for this feature.

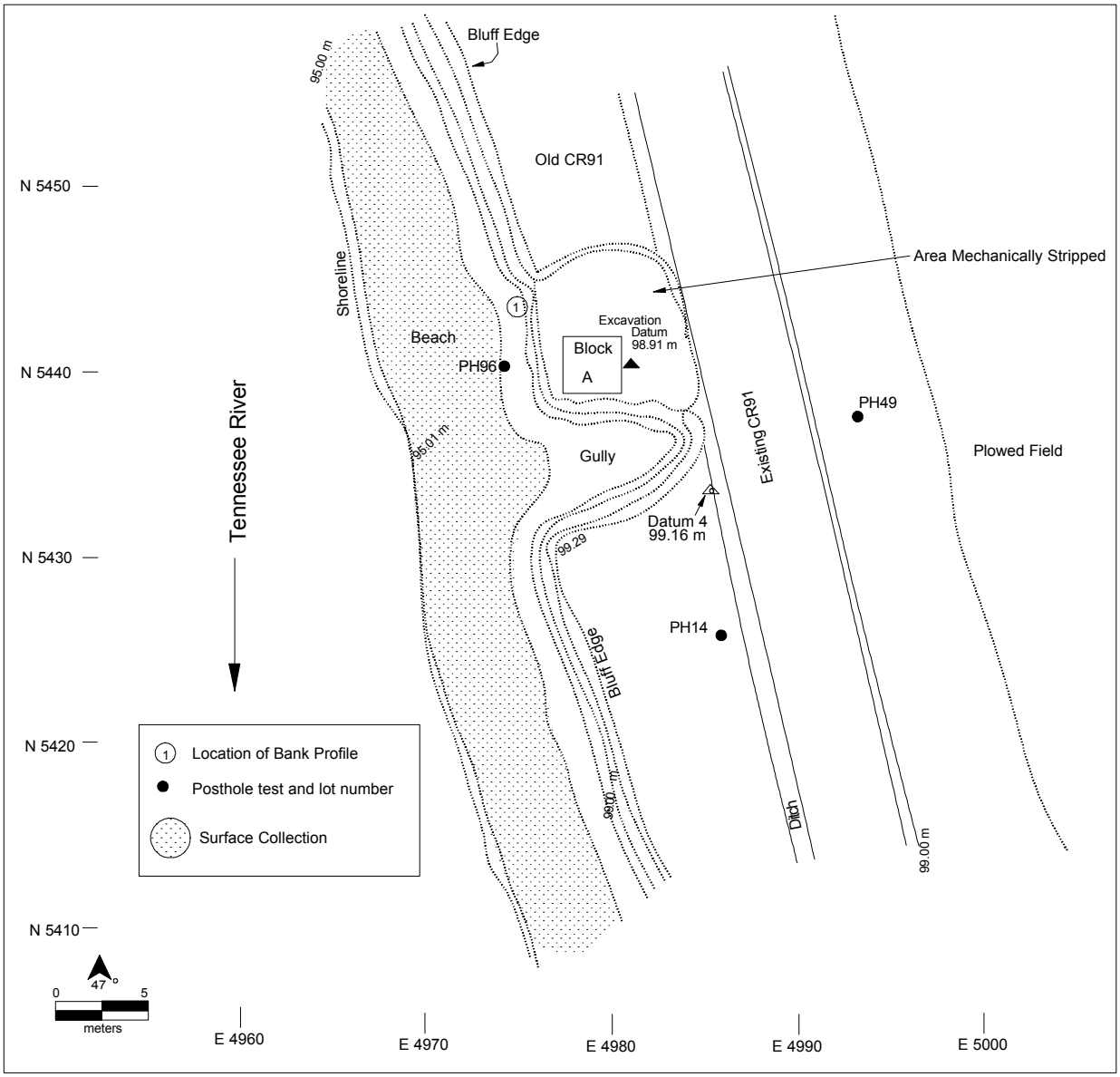

Figure 12. Site Plan in Vicinity of Block A

Figure 13. West Profile of Block A, 1Ja643

Figure 14. Southwest View of Block A, 1Ja643

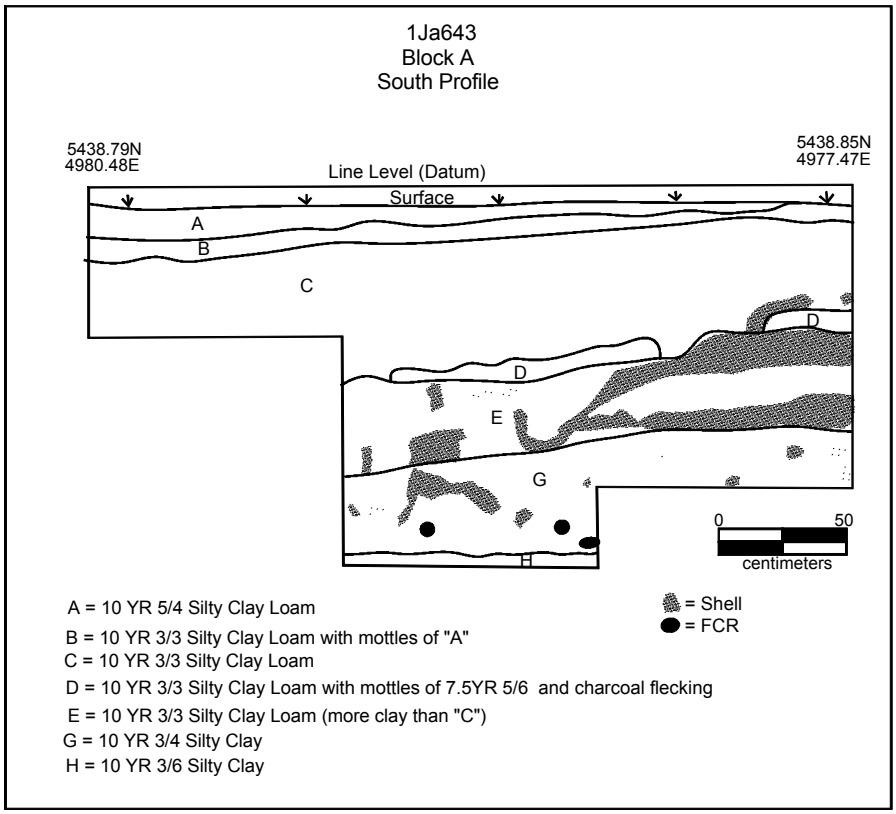

Figure 15. South Profile, Block A, 1Ja643

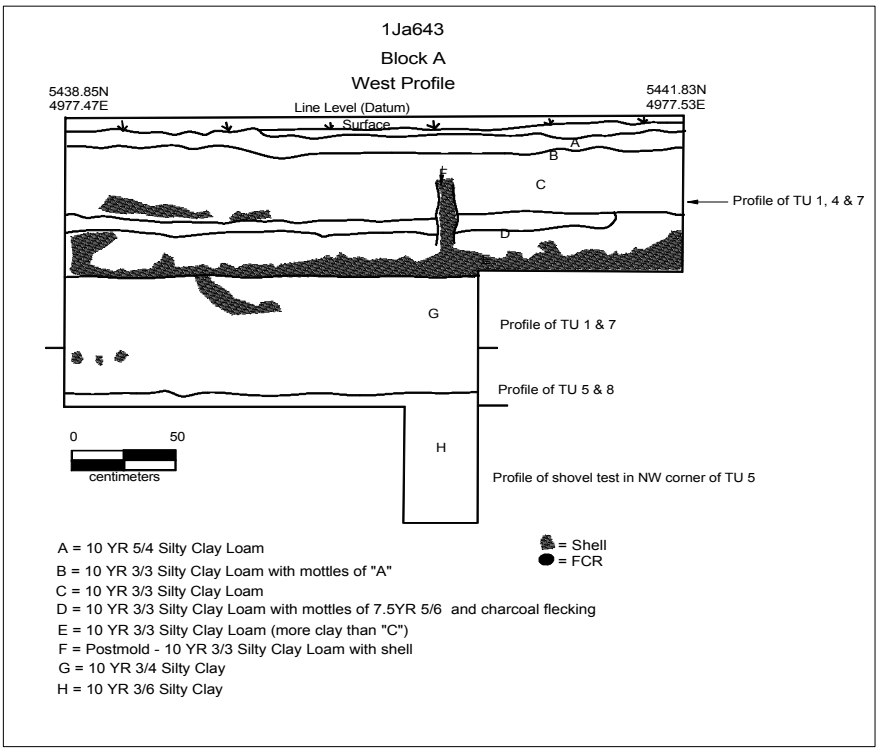

Figure 16. West Profile, Block A, 1Ja643

Figure 17. Features 1, 2, and 3, After Excavation, 1Ja643

Figure 18. Feature 4, 1Ja643

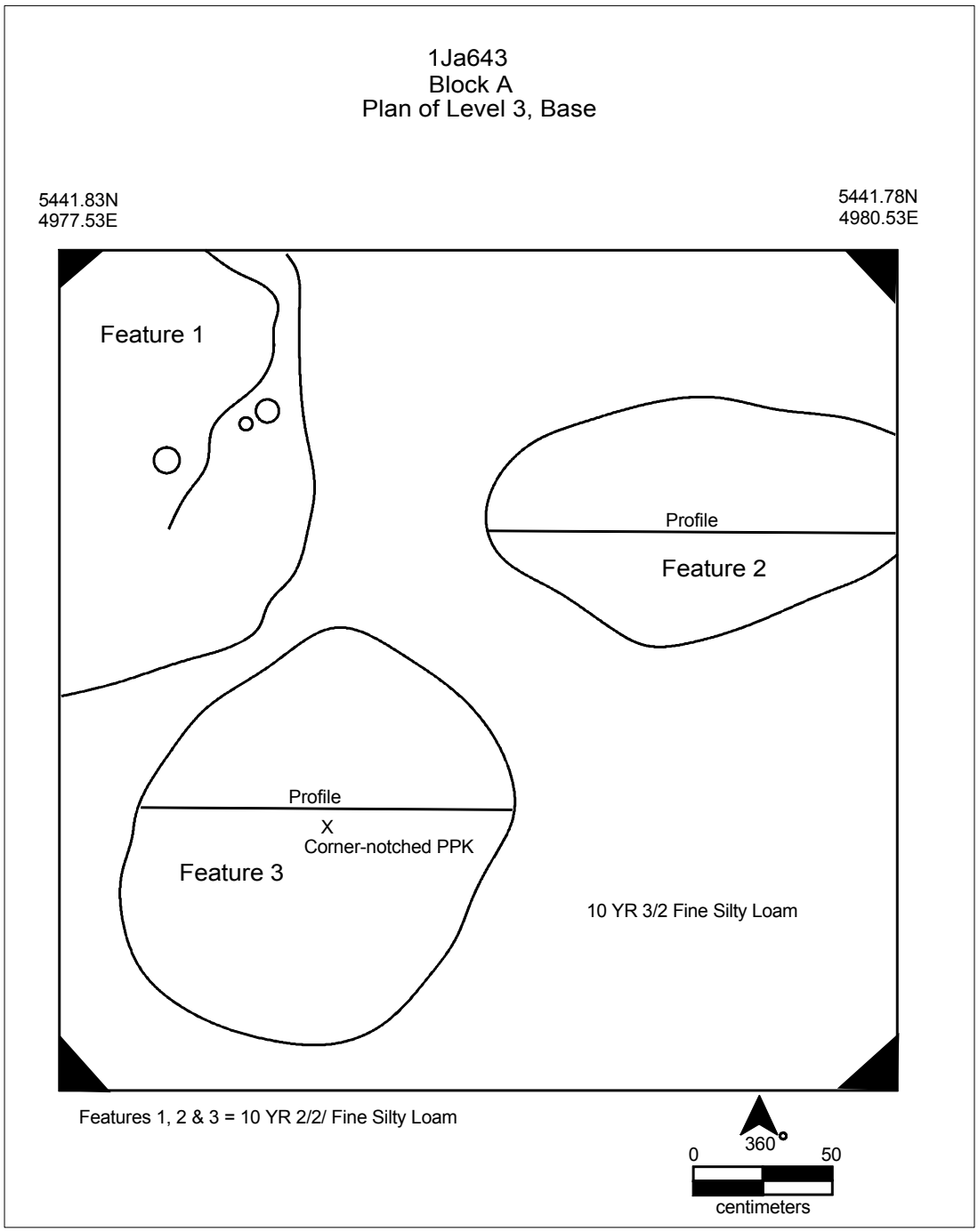

Figure 19. Plan of Features 1, 2, and 3, Block A, 1Ja643

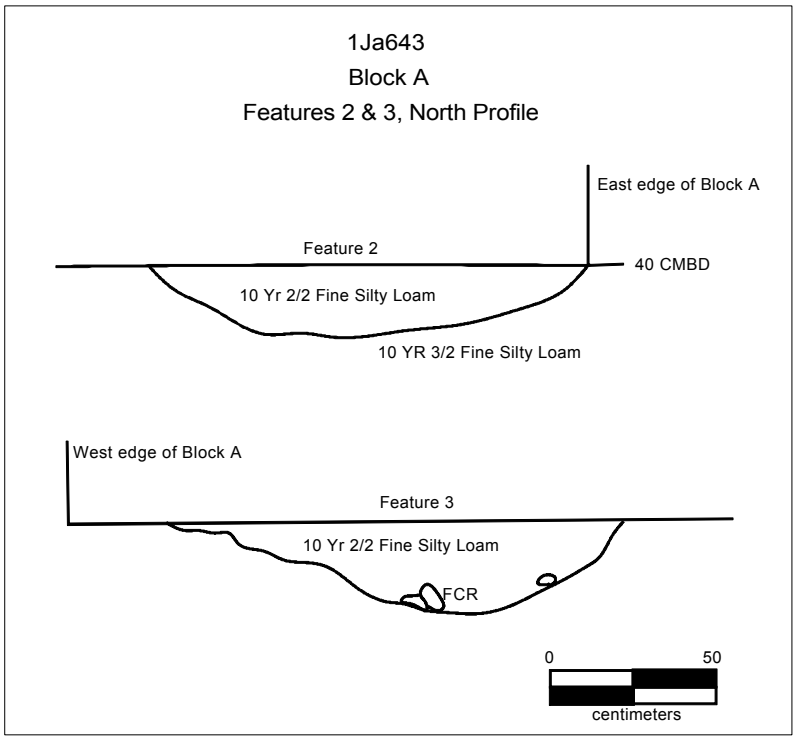

Figure 20. Profiles of Features 2 and 3, Block A, 1Ja643

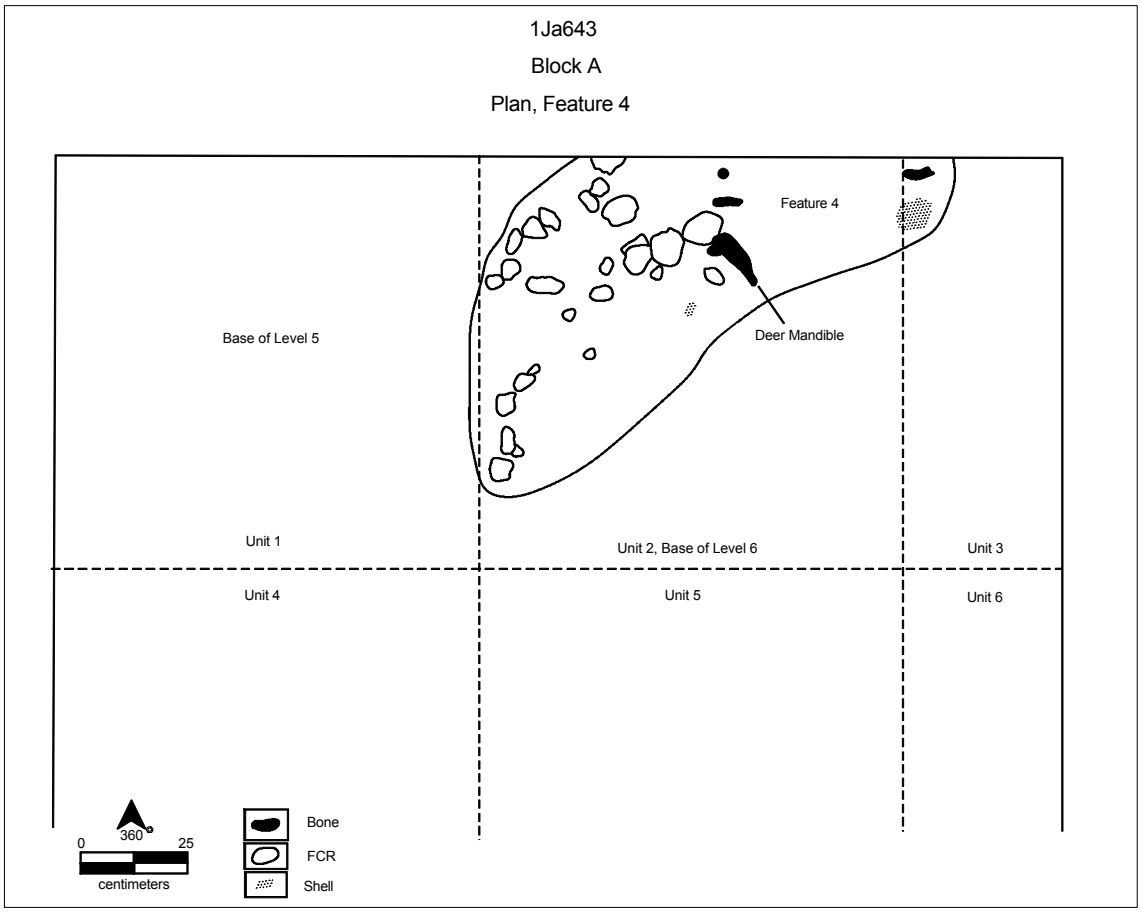

Figure 21. Plan of Feature 4, Block A, 1Ja643

Feature 2 consisted of a large, elongated basin-shaped pit that was located within Test Units 2, 3, 5, and 6. It was originally defined at the base of Level 3. Feature 2 contained 38 aboriginal pottery sherds, including Long Branch Fabric Marked (n=16), Wright Check Stamped (n=2), and residual sherds. The chipped stone assemblage was nondiagnostic and included 32 pieces of debitage and 3 informal unifacial flake tools. All were produced from Ridge and Valley chert. The feature yielded 479 g of fire cracked rock. The ceramics indicate an Early Middle Woodland deposition date for this feature.

Feature 3 consisted of a large, elongated basin-shaped pit that was located within Test Units 4, 5, 7, and 8. It was originally defined at the base of Level 3. Feature 3 contained 95 aboriginal pottery sherds, including: Long Branch Fabric Marked (n=38), plain, Wright Check Stamped, simple stamped, and residual ware. The chipped stone assemblage included: 120 pieces of debitage, 1 corner notched PPK, 1 biface fragment, 1 perforator, 3 utilized flakes, and 1 informal unifacial flake tool. Two possible ground stone items also were contained in Feature 3. With the exception of one metavolcanic debitage fragment, all chipped stone in this feature was Ridge and Valley chert. The feature yielded 1.4 kg of firecracked rock. It also yielded 3 small daub fragments, which is noteworthy given the paucity of daub that was observed in the general excavations. The ceramics indicate an Early Middle Woodland deposition date for this feature.

Feature 4 consisted of a concentration of fire cracked rocks and animal bone, which was located primarily in Test Unit 2. Although these artifacts may have been within a pit feature, the surrounding matrix soils were indistinguishable so that no pit was clearly identified. This feature was first recognized during the excavation of Level 6 and the upper zone of the feature was likely removed with the Test Unit 2 fill (See Appendix 1, Test Unit 2, Level 5). Upon excavation, an oval-shaped pit outline was discerned. One Ridge and Valley chert debitage fragment and 308 g of firecracked rock was recovered from Feature 4. The age of this feature was not determined. Given the absence of pottery in its remaining fill, it may be older than Features 1-3.

None of these features (Features 1-4) yielded any substantial fragments of charcoal that were suitable for radiometric dating. They clearly demonstrate, however, the feature potential at 1Ja643. The identification of pit features in dark, organic midden soils is admittedly difficult and the potential for recognizing distinct features is often improved when one excavates on the edge of a midden deposit. This opportunity to examine the midden margin is afforded at 1Ja643, particularly in the Woodland period stratigraphic zones above the most dense shell deposit.

Excavation Block B

Work Area 2 exhibited a high frequency of artifacts on the lake shore and a discontinuous thin lens of freshwater shellfish remains in the exposed bank. This proposed work area was sampled by excavation Block B, which measured 6 m^2 and was oriented as a 3 x 2 m rectangle with an east-west long axis and composed of Test Units 10-15. Block B was located at 5602.2-5604.2N and 4958.6-4961.6E. The datum elevation used for measurements at Block B was 98.69 m (Figure 22). Excavation of this block began after removal of the road fill zones and disturbed strata. A representative view of Block B, at the completion of excavation, is shown in Figure 23. The northern soil profile of Block B is illustrated in Figure 24. Test Units 10, 11, 13, and 14 were excavated to the base of Level 4. Test Unit 15 was excavated to the base of Level 9. Test Unit 12 was excavated to the base of Level 12.

Material Culture

Pottery

The present study recovered a sample of 2,009 aboriginal pottery sherds from 1Ja643. Forty-three percent (n=846) of these sherds, however, were unidentifiable. Block A yielded 1,133 sherds, of which 696 were identifiable. Block B yielded 735 sherds, of which 376 were identifiable. Other site contexts yielded 141 sherds and of these, 91 were identified. A summary of the pottery distribution in Blocks A and B and other contexts is provided in Table 1.

The predominate pottery type was Long Branch Fabric Impressed ware, which comprised approximately 45.5 percent of the overall pottery assemblage, or 78.6 percent (n=914) of the identified wares. Long Branch wares were manufactured throughout the Woodland period in the middle Tennessee River valley (Haag 1939). These wares date to the Early Woodland period in northeastern Alabama (Sears and Griffin 1950a). Oakley and Futato (1975) obtained a radiocarbon date of A.D. 100 (1850+/-125 B.P.) (GX-3102) from a feature containing Long Branch Fabric Marked, Mulberry Creek Plain, and O'Neal Plain pottery at the Little Bear Creek site, southwest of the study area. Examples of Long Branch sherds from 1Ja643 are shown in Figure 25. Selected examples of other wares are shown in Figure 26.

The next most prolific identified ware at 1Ja643 was Mulberry Creek Plain, which comprised 8.4 percent of the overall pottery assemblage and 14.5 percent (n=169) of the identified wares. Block B had a slightly higher percentage of plain wares (15.7%) compared to Block A (14.5%). This ware is an undecorated limestone tempered pottery

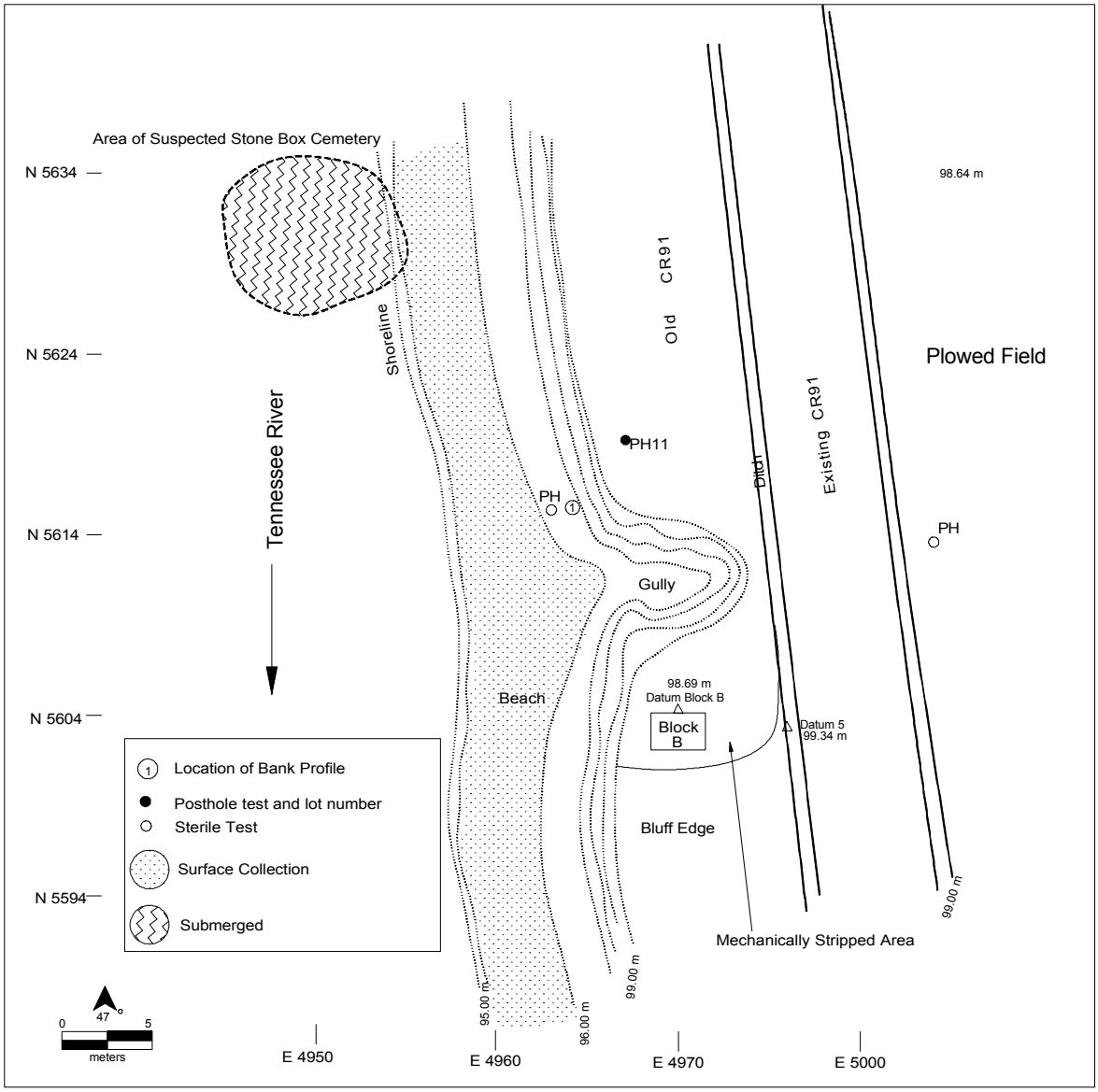

Figure 22. Site Plan in Vicinity of Block B, 1Ja643

Figure 23. East view of Block B, 1Ja643.

that was manufactured throughout the Woodland period in the middle Tennessee River valley (Haag 1939).

Wright Check Stamped is a limestone tempered pottery with a check stamped design that was manufactured in the Middle Woodland period in the middle Tennessee River valley (Haag 1939). Sitewide, Wright Check Stamped constituted 4.6 percent (n=54) of the identified wares. This pottery type was best represented in Block B, where it made up 6.6 percent (n=25) of the identified pottery. Block A had relatively less Wright Check Stamped ware (2.7%, n=19).

The other decorated wares comprise less than 3 percent of the identified wares. These include cord marked, simple

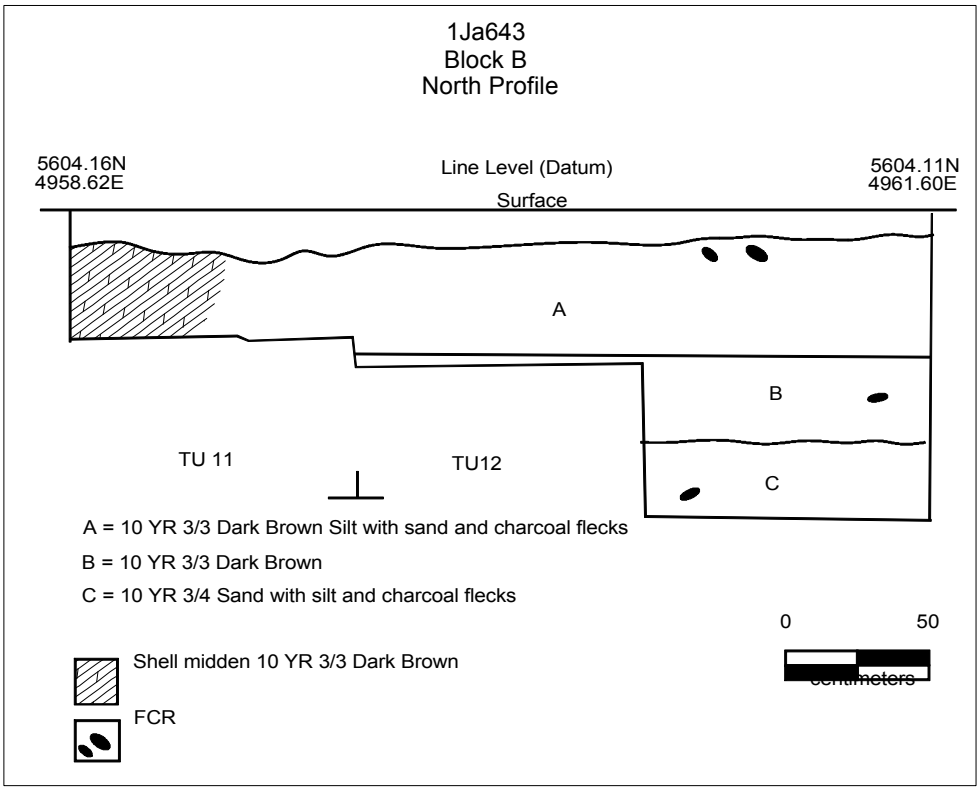

Figure 24. North Profile, Block B, 1Ja643

Table 1. Pottery Summary, 1Ja643.

	Block A		Block B		Other Contexts		Site Total	
Pottery Description	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Long Branch Fabric Marked	559	80.3	285	75.8	70	76.9	914	78.6
Mulberry Creek Plain	101	14.5	59	15.7	9	9.9	169	14.5
Wright Check Stamped	19	2.7	25	6.6	10	11.0	54	4.6
Cordmarked	8	1.1	0	0.0	1	1.1	9	0.8
Simple Stamped	5	0.7	2	0.5	0	0.0	7	0.6
Corn Cob Marked	0	0.0	3	0.8	1	1.1	4	0.3
Complicated Stamped	3	0.4	0	0.0	0	0.0	3	0.3
Zoned/Incised/Punctated	0	0.0	2	0.5	0	0.0	2	0.2
Cordwrapped Dowel Impressed	1	0.1	0	0.0	0	0.0	1	0.1
Total of Identifiable Sherds	696		376		91		1163	
Residual	431	38.0	347	47.2	43	30.5	821	40.9
Unidentified Decorated	6	0.9	11	2.8	7	7.1	24	2.0
Unidentified Stamped	0	0.0	1	0.3	0	0.0	1	0.1
Total Sherds	1133	39	735	50	141	38	2009	

stamped, corn cob marked, complicated stamped, zoned/incised/punctated (Gulf coastal sand tempered trade ware), and cord wrapped dowel impressed. Although the frequencies of these minority wares was low, some important distributional trends were noted. Cord marked ware (n=8), complicated stamped ware (n=3), and cord wrapped dowel impressed ware (n=1) were found exclusively in Block A. Zoned/incised/puncated ware (n=2) and corn cob marked ware (n=3), however, were absent from Block A. Simple stamped ware was present in both excavation blocks in nearly equal proportions. Corn cob marked ware is reliable indirect evidence of corn cultivation and its presence in Block B may signal the later relative age of the Woodland component in Block B compared to the Woodland component in Block A. These differences may indicate that the Woodland occupations in the two block excavations, while similar in many respects, may represent two different occupation episodes with the one in Block B slightly later than Block A.

Stone Tools

A total of 274 aboriginal stone tools was recovered from the present study of 1Ja643. These include chipped stone and ground stone specimens, although the majority were chipped stone. These stone tools are summarized by Block and Level in Table 2.

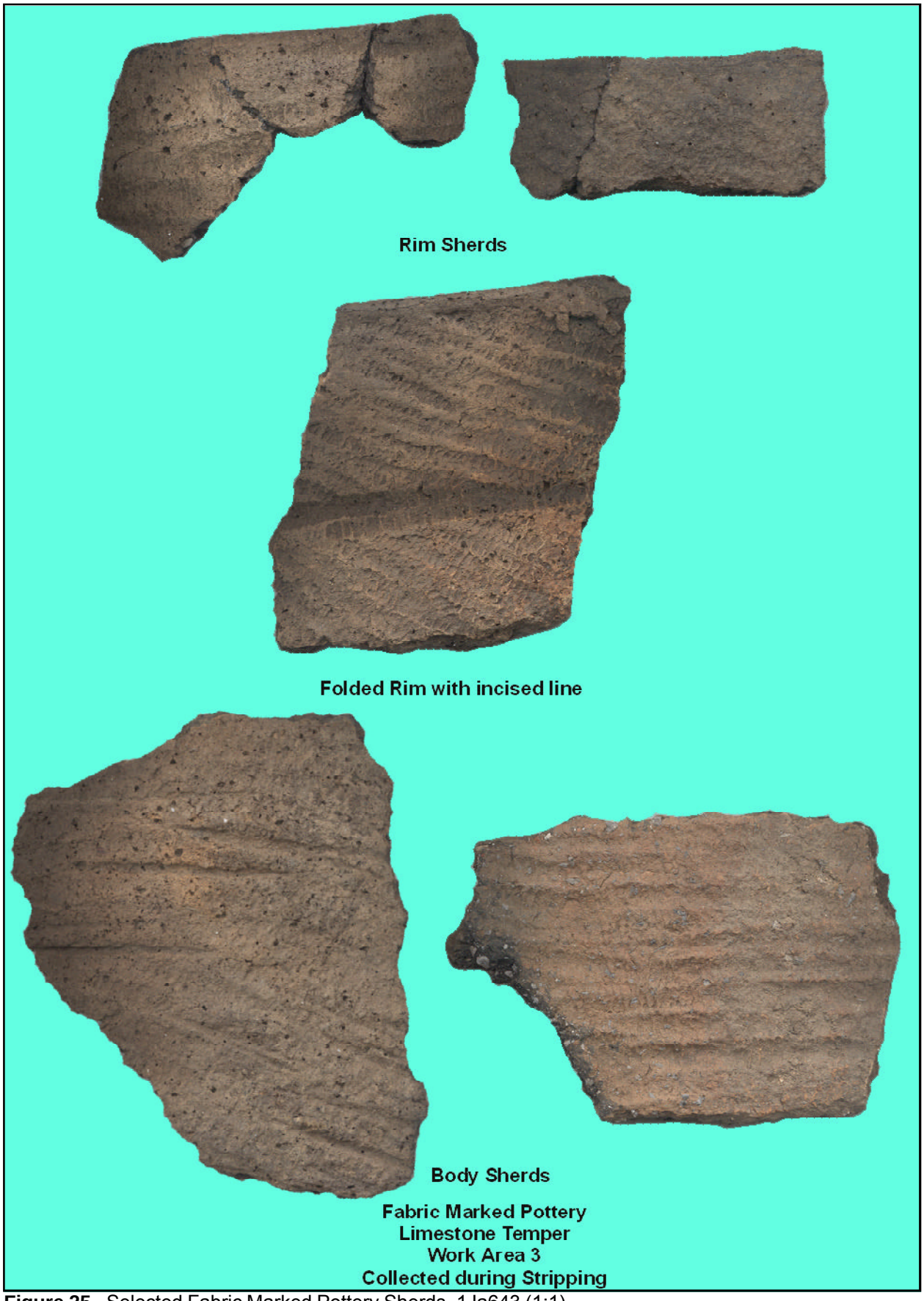

Figure 25. Selected Fabric Marked Pottery Sherds, 1Ja643 (1:1)

Figure 26. Selected Other Pottery Sherds, 1Ja643 (1:1)

Table 2. Stone Tool Summary, 1Ja643.

Block	Level	Description	Comment	Count
Surface	NA	Core Tool	Ridge and Valley Chert	2
Surface	NA	Unifacial Flake Tool, Formal	Unidentified Gray/Black Chert	2
Surface	NA	Unifacial flake tool, informal	Unidentified Brown Chert	1
Surface	NA	Unifacial flake tool, informal	Ridge and Valley Chert	1
Surface	NA	Unifacial flake tool, informal	Ridge and Valley Chert	10
Surface	NA	Bifacial flake tool, informal	Unidentified Stone	1
Surface	NA	Perforator	Ridge and Valley Chert	1
Surface	NA	Utilized flake	Unidentified Stone	1
Surface	NA	Large triangular PPK	Ridge and Valley Chert	2
Surface	NA	PPK fragment	Ridge and Valley Chert	2
Surface	NA	Biface fragment	Unidentified Stone	1
Surface	NA	Stone bowl gorget	Soapstone	1
TOTAL				**25**
A	1	Bifacial flake tool, informal	Ridge and Valley Chert	1
A	1	Utilized flake	Ridge and Valley Chert	2
A	1	Biface fragment	Ridge and Valley Chert	1
A	2	Unifacial Flake Tool, Formal	Ridge and Valley Chert	1
A	2	Unifacial flake tool, informal	Ridge and Valley Chert	1
A	2	Perforator	Ridge and Valley Chert	2
A	2	Large triangular PPK	Ridge and Valley Chert	1
A	2	PPK fragment	Unidentified Stone	1
A	2	PPK fragment	Ridge and Valley Chert	2
A	2	Biface fragment	Ridge and Valley Chert	1
A	2	Groundstone fragment	Soapstone	1
A	2	Possible Groundstone	Unidentified Stone	2
A	2	Hammerstone/ground stone	Unidentified Stone	3
A	3	Unifacial flake tool, informal	Ridge and Valley Chert	6
A	3	Formal endscraper	Ridge and Valley Chert	1
A	3	Perforator	Ridge and Valley Chert	2
A	3	Utilized flake	Ridge and Valley Chert	1
A	3	Large triangular PPK	Ridge and Valley Chert	1
A	3	Biface fragment	Ridge and Valley Chert	4
A	4	Possible Groundstone	Sandstone	1
A	4	UID ground stone	Unidentified metalic stone	1
A	4	Unifacial flake tool, informal	Ridge and Valley Chert	6
A	4	Perforator	Ridge and Valley Chert	4
A	4	Hammerstone	Sandstone	1
A	4	Hammerstone	Quartzite	2
A	4	Hammerstone	Unidentified Stone	1
A	4	Utilized flake	Ridge and Valley Chert	3
A	4	Corner-notched PPK	Ridge and Valley Chert	1
A	4	Large triangular PPK	Ridge and Valley Chert	2
A	4	PPK fragment	Ridge and Valley Chert	1
A	4	Biface fragment	Ridge and Valley Chert	3
A	4	Stone bowl sherd	Soapstone	1
A	4	Groundstone Disk	Sandstone	1
A	4	Groundstone fragment	Shale	1
A	5	Possible Groundstone	Limestone	1
A	5	Unifacial flake tool, informal	Unidentified Stone	1
A	5	Unifacial flake tool, informal	Ridge and Valley Chert	1
A	5	Bifacial flake tool, informal	Ridge and Valley Chert	1
A	5	Drill	Ridge and Valley Chert	1

Block	Level	Description	Comment	Count
A	5	Hammerstone	Unidentified Stone	1
A	5	Hammerstone	Quartzite	3
A	5	Large triangular PPK	Ridge and Valley Chert	1
A	5	PPK fragment	Unidentified Stone	1
A	5	PPK fragment	Ridge and Valley Chert	1
A	5	Biface fragment	Ridge and Valley Chert	1
A	6	Possible Groundstone	Unidentified Stone	2
A	6	Unifacial flake tool, informal	Ridge and Valley Chert	1
A	6	Utilized flake	Ridge and Valley Chert	2
A	6	Straight stemmed PPK	Ridge and Valley Chert	1
A	6	Side-notched PPK	Ridge and Valley Chert	1
A	6	Small triangular PPK	Ridge and Valley Chert	1
A	6	PPK fragment	Ridge and Valley Chert; TIP	1
A	6	Stone bowl sherd	Soapstone	1
A	6	Groundstone fragment	Shale	1
A	7	Possible Groundstone	Metavolcanics	1
A	7	UID ground stone	Limonite	1
A	7	Unifacial flake tool, informal	Ridge and Valley Chert	3
A	7	Utilized flake	Ridge and Valley Chert	1
A	7	Contracting stemmed PPK	Ridge and Valley Chert	1
A	7	Straight stemmed PPK	Ridge and Valley Chert	1
A	7	Side-notched PPK	Ridge and Valley Chert	1
A	7	Expanded stemmed PPK	Unidentified Stone	1
A	7	PPK fragment	Unidentified White Chert	1
A	7	Biface, complete	Ridge and Valley Chert	1
A	8	Unifacial flake tool, informal	Ridge and Valley Chert	3
A	8	Hammerstone	Quartzite	1
A	8	Straight stemmed PPK	Ridge and Valley Chert	2
A	8	Expanded stemmed PPK	Ridge and Valley Chert	1
A	8	Biface fragment	Ridge and Valley Chert	1
A	8	Stone bowl sherd	Soapstone	2
A	8	Groundstone fragment	Limestone	9
A	9	Chipped stone axe	Limestone	2
A	9	UID ground stone	Sandstone	1
A	9	Bifacial flake tool, informal	Ridge and Valley Chert	1
A	9	Utilized flake	Ridge and Valley Chert	1
A	9	Straight stemmed PPK	Ridge and Valley Chert	1
A	9	PPK fragment	Limestone	1
A	9	Groundstone fragment	Limestone	1
A	10	Unifacial flake tool, informal	Ridge and Valley Chert	1
A	10	Bifacial flake tool, informal	Quartzite	1
A	10	Hammerstone/ground stone	Unidentified Stone	1
A	10	Biface fragment	Ridge and Valley Chert	1
A	10	Groundstone fragment	Soapstone	1
A	10	Groundstone fragment	Limestone	1
A	11	Straight stemmed PPK	Ridge and Valley Chert	1
A	11	Stone bowl sherd	Soapstone	1
TOTAL				**134**
B		Straight stemmed PPK	Ridge and Valley Chert	1
B	1	Possible Groundstone	Unidentified Stone	1
B	1	Abrader	Ferrugineous Sandstone	1
B	1	Bifacial chopping/cutting tool	Limestone	1

Block	Level	Description	Comment	Count
B	1	Bifacial chopping/cutting tool	Slate	1
B	1	Unifacial flake tool, informal	Ridge and Valley Chert	6
B	1	Unifacial flake tool, informal	Unidentified Gray/Black Chert	3
B	1	Utilized flake	Ridge and Valley Chert	5
B	1	Straight stemmed PPK	Ridge and Valley Chert	1
B	1	Large triangular PPK	Ridge and Valley Chert	1
B	1	PPK fragment	Ridge and Valley Chert	5
B	1	Biface, complete	Unidentified Gray/Black Chert	1
B	1	Biface, complete	Ridge and Valley Chert	1
B	1	Biface fragment	Ridge and Valley Chert	2
B	1	Stone gorget fragment	Slate	4
B	2	Unifacial flake tool, informal	Ridge and Valley Chert	9
B	2	Bifacial flake tool, informal	Ridge and Valley Chert	1
B	2	Hammerstone	Unidentified Stone	1
B	2	Utilized flake	Ridge and Valley Chert	3
B	2	Utilized flake	Ridge and Valley Chert	1
B	2	Corner-notched PPK	Ridge and Valley Chert	1
B	2	Large triangular PPK	Ridge and Valley Chert	2
B	2	PPK fragment	Ridge and Valley Chert	1
B	2	Stone gorget fragment	Slate	1
B	3	Unifacial flake tool, informal	Ridge and Valley Chert	17
B	3	Bifacial flake tool, informal	Ridge and Valley Chert	1
B	3	Bifacial flake tool, informal	Unidentified Stone	1
B	3	Utilized flake	Unidentified Stone	2
B	3	Utilized flake	Ridge and Valley Chert	5
B	3	Straight stemmed PPK	Ridge and Valley Chert	1
B	3	Early Stage Preform	Ridge and Valley Chert	2
B	3	Ovate PPK	Ridge and Valley Chert	1
B	3	Biface, complete	Ridge and Valley Chert	1
B	3	Biface fragment	Ridge and Valley Chert	6
B	3	Stone bowl sherd	Soapstone	1
B	3	Stone gorget fragment	Slate	1
B	3	Groundstone fragment	Soapstone	1
B	4	Unifacial flake tool, informal	Ridge and Valley Chert	1
B	4	Utilized flake	Ridge and Valley Chert	1
B	5	Unifacial flake tool, informal	Ridge and Valley Chert	2
B	5	Bifacial flake tool, informal	Ridge and Valley Chert	1
B	6	Unifacial flake tool, informal	Ridge and Valley Chert	2
B	6	Hammerstone	Ridge and Valley Chert	1
B	6	Lanceolate PPK	Ridge and Valley Chert	1
B	7	Utilized flake	Ridge and Valley Chert	3
B	7	Expanded stemmed PPK	Ridge and Valley Chert	1
B	7	Late stage PPK preform	Ridge and Valley Chert	1
B	7	Unifacial flake tool, informal	Ridge and Valley Chert	1
B	8	Core Tool	Ridge and Valley Chert	1
B	8	Unifacial flake tool, informal	Ridge and Valley Chert	1
B	8	Straight stemmed PPK	Ridge and Valley Chert	1
B	8	Biface fragment	Ridge and Valley Chert	2
B	9	PPK fragment	Ridge and Valley Chert	1
TOTAL				**115**

Projectile Points or Hafted Knives (PPK)

The most informative chipped stone tools were projectile points, or knives (PPK). Eleven stemmed PPKs were recovered from 1Ja643. Measured examples included: 8 straight stemmed, 2 expanded stemmed, and 1 contracting stemmed PPK. Metric attributes for the PPKs are provided in Table 3. Examples of the stemmed PPKs are depicted in Figure 27. The use of PPK type names was not attempted. The metric attributes and accompanying PPK illustrations should allow archaeologists to do so if desired.

The straight stemmed PPKs were mostly recovered from deeper strata. Five of the eight came from below Level 5, which indicates their association with the Middle or Late Archaic components. The complete specimens of straight stemmed PPKs ranged in length from 35.5 to 53.5 mm and averaged 55.5 mm; ranged in width from 26.6 to 33.8 mm and averaged 28.7 mm; ranged in haft length from 6.2 to 16.1 mm and averaged 11.2 mm; ranged in haft width from 11.7 to 21.5 mm and averaged 17.6 mm; and ranged in thickness from 6.7 to 15.4 mm and averaged 9.3 mm.

The expanded stemmed PPKs included one from Block A, Level 8 and one from Block B, Level 4. The contracting stemmed PPK was recovered from Block A, Level 7. These PPKs also are likely associated with the Middle or Late Archaic component at 1Ja643.

Eleven large triangular projectile points were recovered from 1Ja643. Examples of these are depicted in Figure 28. Five of these were complete specimens, while the other are proximal fragments. Five were from Block A and four were from Block B. The large triangular PPKs, which are associated with the Woodland component, were mostly recovered from the upper excavation strata. Only two specimens were recovered below excavation Level 4.

The complete specimens of large triangular PPKs ranged in length from 42.7 to 66.2 mm and averaged 55.5 mm; ranged in width from 22 to 29.1 mm in width and averaged 26.3 mm; ranged in haft width from 20.8 to 31 mm and averaged 25.8 mm; and ranged in thickness from 5.3 to 12.3 mm and averaged 8.7 mm. The PPKs generally had a flat or incurvate base and expanded or straight sides. Several of the larger complete specimens may represent manufacturing rejects, judging from their thickness and crude appearance.

Four other projectile points were recovered from 1Ja643 and these included: 2 side notched and 2 corner notched examples (see Figure 28). Although side notched

Table 3. Attributes of Selected Projectile Point/Knives (PPKs), 1Ja643.

Block	Level	Lot	Point Type	Length	Width	Haft Length	Haft Width	Thickness	Raw Material
A	2	32	Large triangular	42.7	26	NA	25.4	8.8	R & V Chert
A	3	45	Large triangular	46.3*	23.6	NA	23.6	10.3	R & V Chert
A	4	57	Corner notched	25.5*	31	8.8	17.5	6.5	R & V Chert
A	4	50	Large triangular	28.5*	25.8	NA	25.8	5.3	R & V Chert
A	4	67	Large triangular	54	28.7	NA	28.7	7.6	R & V Chert
A	5	72	Large triangular	66.2	26	NA	24.8	12.3	R & V Chert
A	6	89	Straight stemmed	28.5*	29	8	21	7	R & V Chert
A	7	104	Contracting stemmed	19.9*	21.6*	14.3	16.7	6.9	R & V Chert
A	7	103	Side notched	32.2	18.9	7.7	18.9	6.3	R & V Chert
A	8	116	Expanded stemmed	42.3	40.6	11.2	20	11.6	R & V Chert
A	8	131	Straight stemmed	41.5	31.8	11.3	21.5	10.5	R & V Chert
A	8	132	Straight stemmed	40.2	26.6	12.8	16.7	7.7	R & V Chert
A	9	134	Side notched	33.2*	20	8.7	20	7.3	R & V Chert
A	9	118	Straight stemmed	53.5	31.1	13.9	19.8	15.4	R & V Chert
A	11	152	Straight stemmed	52.4	33.8	12.7	19.2	9.9	R & V Chert
B	1	84	Large triangular	32.1*	25.8	NA	25.8	6.9	R & V Chert
B	1	83	Straight stemmed	35.5	20.6	6.2	11.7	6.7	R & V Chert
B	2	108	Corner notched	33.8*	20.5	9.1	NA	7.2	R & V Chert
B	2	127	Large triangular	26.5*	29.1	NA	29.1	8.7	R & V Chert
B	2	108	Large triangular	54.8	22	NA	20.8	7.7	R & V Chert
B	3	110	Ovate	36.4*	34	NA	NA	10.8	R & V Chert
B	3	109	Preform	50.5	29	NA	NA	10.7	R & V Chert
B	3	110	Straight stemmed	39.7*	29.7	16.1	15	9.6	R & V Chert
B	4	147	Expanded stemmed	39.2	23.2	9.5	17.1	6.5	R & V Chert
B	6	153	Lanceolate/preform	31.5*	31.3	NA	24.2	9.2	R & V Chert
B	7	164	Large triangular	59.6	25.6	NA	23.4	11.6	R & V Chert
Surface		1	Large triangular	39.2*	25.6	NA	25.5	7.5	R & V Chert
Surface		12	Large triangular	35.6*	31	NA	31	9.2	R & V Chert
Surface		126	Straight stemmed	49.5	27	8.3	16.1	7.9	R & V Chert

*denotes broken, incomplete measurement; NA-not applicable; All measurements in millimeters.

and corner notched PPKs are a diagnostic hallmark of the Early Archaic period, these specimens probably are more likely associated with the Middle Archaic occupation (or possibly later). One of the PPKs that was identified as side notched may be a variant of the Yadkin eared type.

Biface production was a significant activity conducted throughout 1Ja643. A variety of late stage preforms and other bifaces was recovered from 1Ja643. Metric attributes for a few selected examples also are provided in Table 2.

A variety of other chipped stone tools were recovered from excavations at 1Ja643. These range from a few formal tools, such as a hafted endscraper to numerous

Figure 27. Selected Stemmed Projectile Point/Knives, 1Ja643 (1:1)

Figure 28. Selected Triangular and Other Projectile Point/Knives, 1Ja643 (1:1)

informal flake tools. Most were informal (or expedient) tools that exhibit little evidence of curation, hafting, or multiple use. The majority in this category were unifacially worked flakes that exhibited no special preparation. Examples of these and other miscellaneous chipped stone tool types are shown in Figure 29.

The endscraper was recovered from Test Unit 1, Level 3 in Block A. Three other formal unifacial flake tools were found at 1Ja643. One was from Test Unit 8, Level 2 in Block A and the other two were from surface contexts. Eight small perforators were recovered from Block A but none were found in Block B. One drill was recovered from Test Unit 3, Level 5 in Block A.

A total of 76 informal unifacial flake tools and nine informal bifacial flake tools was recovered from 1Ja643. Thirty-one minimally utilized flakes were identified, which may represent single-episode tools. Generally, however, the flake tool assemblage was relatively generic and unimpressive, and did not express a high level of diversity or sophistication.

Chipped Stone Debitage

Chipped stone debitage was the most abundant artifact recovered from 1Ja643. This included 32 cores and 4,948 pieces of flaking debris. The overwhelming majority of this debris was Ridge and Valley chert (n=4,752) but a variety of other knapped materials was identified including unidentified chert, metavolcanics, limestone, quartzite, coastal plain chert, sandstone, quartz, jasper, and chalcedony. These data are summarized in Table 4.

Gorgets

Several formal ground stone artifacts were recovered from the excavation at 1Ja643. These included one carefully polished slate 2-hole expanding bar gorget fragment, which was broken into several smaller pieces, recovered from Level 1 of Block B. Engraved slate gorget fragments were recovered from Levels 2 and 3 of Block B. One gorget fragment, which was recovered from the beach, was manufactured from a soapstone bowl sherd. All of these gorgets are likely associated with the Woodland period occupation on the site. Interestingly, despite its larger size, no gorget fragments were recovered from Block A. This may indicate a substantially different use of space for the Block B vicinity during the Woodland period. Examples of gorget and stone bowl fragments are shown in Figure 30.

Figure 29. Selected Chipped Stone Tools, 1Ja643 (1:1)

Table 4. Debitage Summary, 1Ja643

CORES AND CORE TOOLS

Block	Level	Description	Count
Surface	NA	Core Tool	2
Surface	NA	Random core	6
			8
A	2	Random core	1
A	3	Random core	6
A	4	Random core	2
A	5	Random core	3
A	7	Random core	3
A	8	Chunk	2
A	9	Random core	2
A	10	Random core	1
A	10	UID core	1
A	14	Chunk	3
Total			**24**
B	1	Random core	2
B	1	Chunk	2
B	3	Random core	1
B	6	Random core	2
B	8	Core Tool	1
Total			**8**
TOTAL CORES			**40**

DEBITAGE

Block	Level	Description	Count
Surface	NA	Debitage, Ridge & Valley Chert	6
Total			**60**
A	1	Debitage, Ridge & Valley Chert	17
A	2	Debitage, quartz	1
A	2	Debitage, Ridge & Valley Chert	215
A	2	Debitage, unidentified chert	1
A	3	Debitage, quartzite	1
A	3	Debitage, metavolcanic	8
A	3	Debitage, Ridge & Valley Chert	183
A	3	Debitage, unidentified chert	8
A	4	Debitage, jasper	1
A	4	Debitage, Coastal Plain Chert	2
A	4	Debitage, quartz	3
A	4	Debitage, metavolcanic	2
A	4	Debitage, Ridge & Valley Chert	426
A	4	Debitage, unidentified chert	1
A	5	Debitage, quartz	1
A	5	Debitage, metavolcanic	9
A	5	Debitage, Ridge & Valley Chert	342
A	5	Debitage, unidentified chert	1
A	6	Debitage, chalcedony	1
A	6	Debitage, limestone	1
A	6	Debitage, metavolcanic	5
A	6	Debitage, Ridge & Valley Chert	483
A	6	Debitage, unidentified chert	11
A	7	Debitage, jasper	1
A	7	Debitage, quartzite	1
A	7	Debitage, metavolcanic	9
A	7	Debitage, Ridge & Valley Chert	317
A	7	Debitage, unidentified chert	6
A	8	Debitage, limestone	1
A	8	Debitage, sandstone	1
A	8	Debitage, quartzite	1
A	8	Debitage, Ridge & Valley Chert	107
A	8	Debitage, unidentified chert	5
A	9	Debitage, limestone	4
A	9	Debitage, Ridge & Valley Chert	53
A	9	Debitage, unidentified chert	9
A	10	Debitage, sandstone	2
A	10	Debitage, metavolcanic	1
A	10	Debitage, Ridge & Valley Chert	56
A	10	Debitage, unidentified chert	3
A	11	Debitage, Ridge & Valley Chert	40
A	11	Debitage, unidentified chert	1
A	12	Debitage, sandstone	1
A	12	Debitage, metavolcanic	1
A	12	Debitage, Ridge & Valley Chert	9
A	13	Debitage, Ridge & Valley Chert	9
A	14	Debitage, Ridge & Valley Chert	5
A	14	Debitage, unidentified chert	1
A	15	Debitage, Ridge & Valley Chert	1
A	16	Debitage, Ridge & Valley Chert	3
A	17	Debitage, Ridge & Valley Chert	3
Total			**2334**

Block	Level	Description	Count
B	1	Debitage, limestone	20
B	1	Debitage, Coastal Plain Chert	2
B	1	Debitage, quartzite	2
B	1	Debitage, metavolcanic	5
B	1	Debitage, Ridge & Valley Chert	593
B	1	Debitage, unidentified chert	18
B	2	Debitage, limestone	1
B	2	Debitage, metavolcanic	2
B	2	Debitage, Ridge & Valley Chert	565
B	2	Debitage, unidentified chert	1
B	3	Debitage, limestone	1
B	3	Debitage, Coastal Plain Chert	2
B	3	Debitage, metavolcanic	4
B	3	Debitage, Ridge & Valley Chert	635
B	3	Debitage, unidentified chert	4
B	4	Debitage, limestone	5
B	4	Debitage, Ridge & Valley Chert	249
B	5	Debitage, sandstone	1
B	5	Debitage, Coastal Plain Chert	1
B	5	Debitage, Ridge & Valley Chert	125
B	6	Debitage, Ridge & Valley Chert	105
B	7	Debitage, limestone	1
B	7	Debitage, Ridge & Valley Chert	126
B	7	Debitage, unidentified chert	1
B	8	Debitage, sandstone	2
B	8	Debitage, Coastal Plain Chert	1
B	8	Debitage, Ridge & Valley Chert	49
B	8	Debitage, unidentified chert	1
B	9	Debitage, Coastal Plain Chert	1
B	9	Debitage, quartzite	2
B	9	Debitage, Ridge & Valley Chert	17
B	10	Debitage, Ridge & Valley Chert	2
B	12	Debitage, Ridge & Valley Chert	1
B	13	Debitage, Ridge & Valley Chert	1
Total			**2546**
TOTAL DEBITAGE			**4940**

Figure 30. Selected Gorget and Stone Bowl Fragments, 1Ja643 (1:1)

Soapstone vessels

Soapstone vessels are frequently reported at midden sites on the Tennessee River, even though the source of this raw material is alien to most of the river valley. Soapstone is a metamorphic rock and does not occur in the Cumberland Plateau or Ridge and Valley physiographic provinces. Therefore, its presence on sites throughout most of the Tennessee River valley is the product of cultural exchange or trade mechanisms. Soapstone vessels were produced at the end of the Archaic period and probably no earlier than 3,700 years ago (Sassaman 1997:13). Very few complete, finished soapstone vessels have been recovered archaeologically in the Southeast. Surprisingly, several that have been recovered have come from burials on shell middens in northern Alabama (Webb and DeJarnette 1948). The closest Alabama source of soapstone to 1Ja643 is probably located in Tallapoosa County, and would have required transport across watershed divides. A more easily accessible source would have been the Blue Ridge Mountains of north Georgia. Recent survey in Towns County located a soapstone quarry near Brasstown Creek, which is in the headwaters of the Tennessee River (Simpkins 1988). Other more distant sources are known from western North Carolina and north Georgia.

Summarizing their occurrence in Chickamauga Lake, Lewis and Kneberg noted: "Large numbers of steatite [soapstone] vessel sherds have been recovered and associated particularly with the Candy Creek Focus of the Woodland pattern. No complete reconstructible vessels were found, but evidence of lugs, engraving, notched lips, and perforations were found" (Sullivan 1995:Volume 1, 145). The association of soapstone vessel sherds in Middle Woodland context, as Lewis and Kneberg assert, goes against the established radiocarbon date record for soapstone vessels (Sassaman 1997). The continued use of soapstone sherds on Middle Woodland sites may represent extensive recycling of broken vessels as raw material for the manufacture of gorgets, pendants, boatstones, and other small ground stone items. Extensive recycling of Archaic lithic materials has been demonstrated through archaeological excavations in the Savannah River uplands and a similar practice is evidenced in the Tennessee River valley. In the central Oconee River valley of Georgia, Elliott (1981) noted that most sites yielded only one or two soapstone vessel sherds. Many of these also may represent transport to the site by Woodland people for the purpose of reuse. Site 1Ja643 contains both Late Archaic and Woodland components, so it is unclear with which component the soapstone sherds are associated.

Seven soapstone vessel sherds were recovered from the present study of 1Ja643. All were relatively small fragments, none weighing more than 90 g. Three of

the sherds were modified, one converted to a gorget, and two were decorated with incised lines. Two were rim sherds and the other five were body sherds. The two decorated vessel sherds were heavily sooted (see Figure 30). One of these was recovered from Block A, Level 11, and the other from Block B, Level 3.

In addition to these soapstone vessel sherds, one sandstone vessel body sherd was recovered from Level 7 of Block A. Sandstone vessels are uncommon in the Southeast, although they have been reported from burial contexts at shell middens in northern Alabama (Webb and DeJarnette 1948). The sandstone sherd from 1Ja643 was not dissimilar in size and thickness to the soapstone examples from the site.

The soapstone sherds from Block A were recovered from Levels 4, 6, 8, and 11, while the single example from Block B was found in Level 3. One small rim sherd was recovered from Feature 1 in Block A. The soapstone vessel rim sherd was recovered from Block B. This specimen had a thickened lip and was decorated on the top of the lip with several narrow incised lines that were oriented perpendicular to the vessel. A small worked soapstone fragment, possibly a portion of a gorget made from a vessel sherd, was recovered from the beach near Work Area 11.

Three other small worked soapstone fragments were recovered from the site: 1 from Block A, Level 2; one from Block A, Level 10; and one from Block B, Level 3. These were likely vessel sherds but were too small for authoritative identification.

Two large axe (or celt) bit fragments were recovered from the lower levels of Block A (see Figure 31). These were found together in Test Unit 5, Level 9 and both were made of limestone.

Fifteen hammerstones were found in the excavations. Thirteen of these were from Block A and only two from Block B. These tools were more common below Level 3. Most of these were river cobbles with minimal shaping, which were difficult to distinguish from naturally battered river cobbles. One ferruginous sandstone abrader was recovered from Test Unit 10, Level 1 in Block B. One small discoidal sandstone stone was recovered from Feature 2 (see Figure 30). The function of this item was not determined.

Bone

Although small in number, the bone fragments recovered from excavations at 1Ja643 offer a wealth of information about the diet of the peoples who occupied the

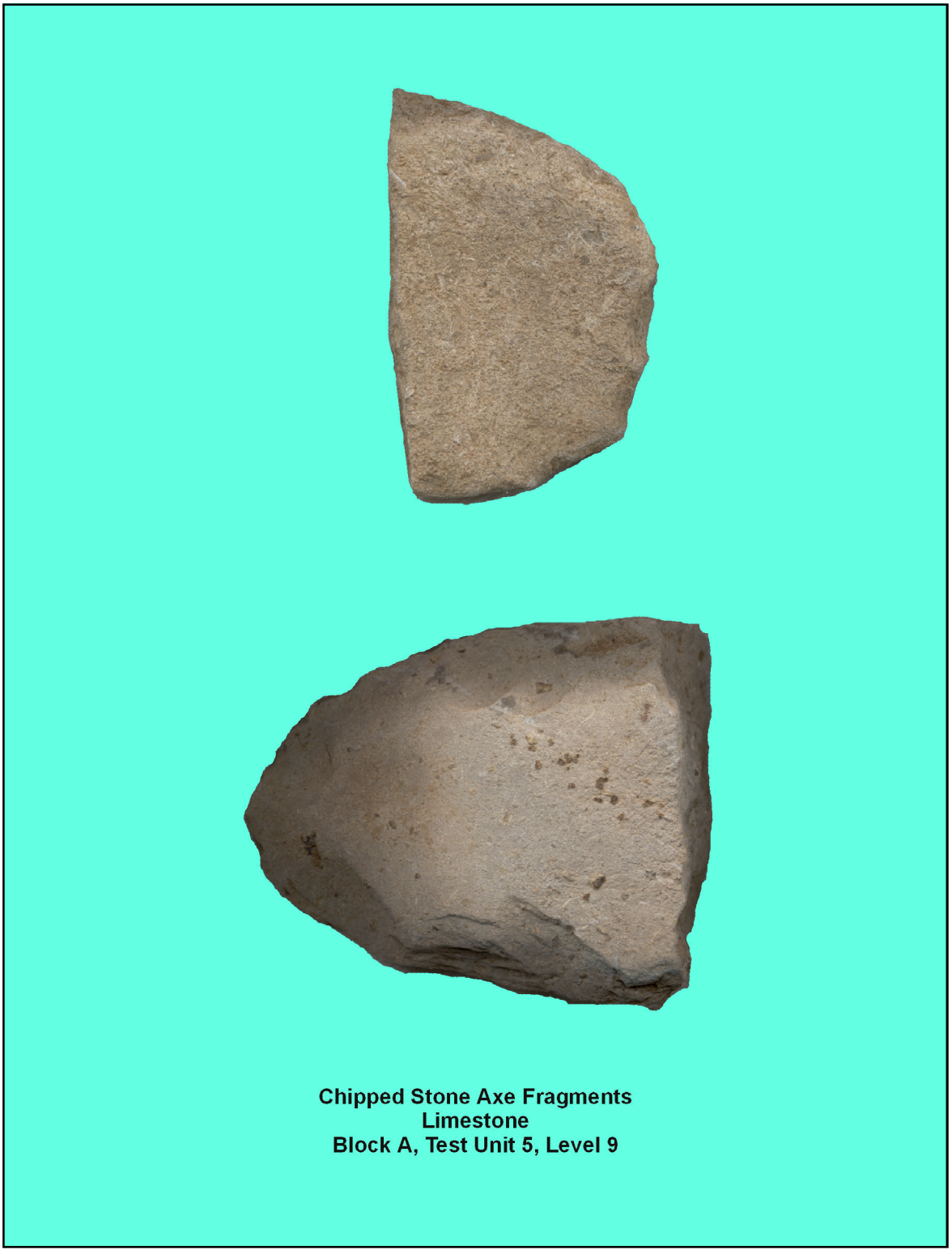

Figure 31. Chipped Stone Axe Fragments, 1Ja643 (1:1)

site as well as seasonal ranges of occupation through time. Twenty-five separate and distinct taxa have been identified by zooarchaeologist Susan L. Scott in the collection of over 700 bones. Included in this are deer; several varieties of fish including freshwater drum, blue or channel catfish, and sucker; possum, mink, fox, and a variety of toads, frogs, and snakes. Size estimates of the fish recovered at the site point to a large river channel source. The average length of fish is projected at around 30 cm with some of the river cats ranging from 60 to 80 cm in size.

Due to the stratified nature of the deposition and excellent bone preservation at 1Ja643 it is possible to extract seasonality information that provides us with a window into site occupation. The Archaic levels exhibited more diversity in range of fauna present and could imply that, as smaller game and fish were relied upon more heavily in the summer months, the site was primarily used as a summer habitation for the Archaic peoples. Deer remains recovered from the Archaic level are generally those of young, immature animals. One specimen, a nearly complete deer toothrow, appears to be from a 13 to 17 month old yearling, which once more points to a summer occupation as deer are usually born from May to August. Although deer was present in the lower levels, it is by far more prevalent in the upper Woodland layers of the site which would indicate a longer occupation period and could imply year round occupation by the more sedentary Woodland peoples (for a more detailed discussion of the faunal remains recovered from 1Ja643, see Appendix V).

Evidence of butchering, stripping of muscle from the bone, and gnawing by rodents and dogs is clearly evident on the bone surfaces. Bone surfaces show little sign of leaching and even small bones have been well preserved in the midden.

Bone Tools

Several bone tools were recovered from Blocks A and B. These are shown in Figure 32. Two of these were informal tools that probably represent a limited use-life. These tools were recognized by the smoothed edge of what would have otherwise been rough splintered bone. Exceptions to this trend include: one tiny perforated awl and one larger bi-ended awl. The perforated awl exhibits a carefully drilled hole, possibly to hold thread for sewing (or less likely for suspension).

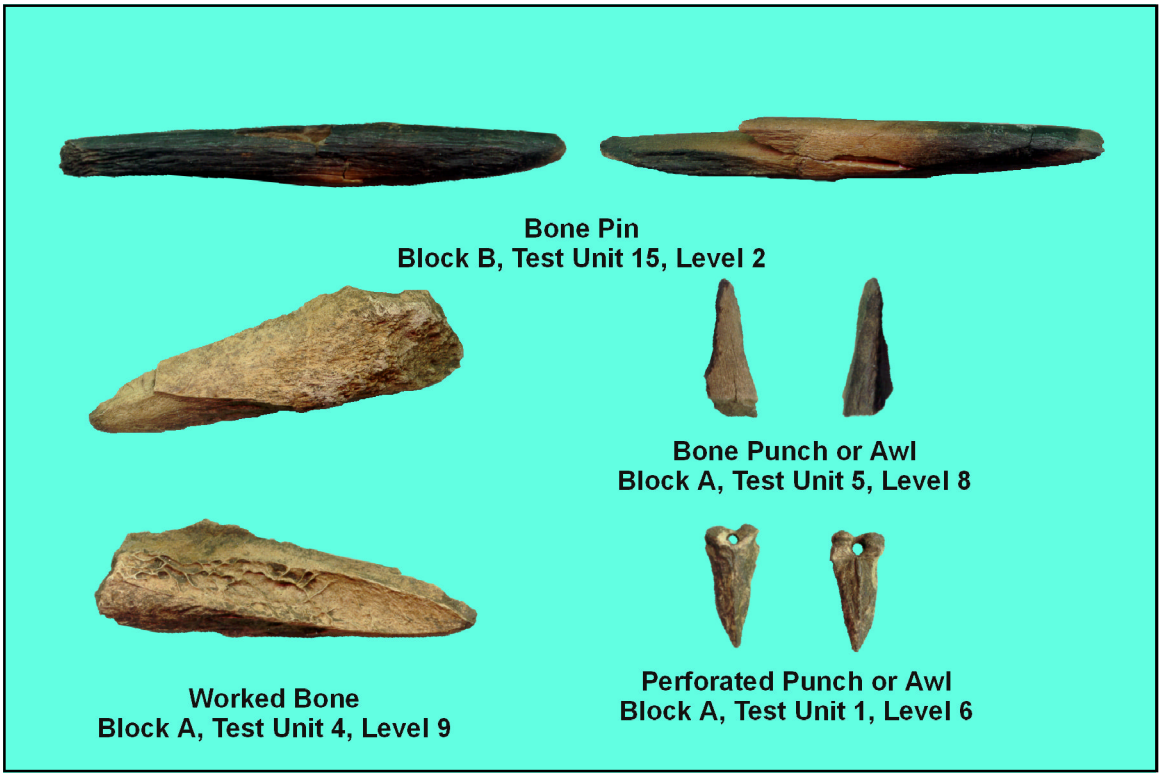

Figure 32. Obverse and reverse of selected Bone Tools, 1Ja643 (1:1)